AMENDMENTS TO THE CLAIMS

1. (Currently Amended) ~~A system for software diagnosis, which diagnoses an un-debugged software having a plurality of program segments related to at least one event, comprising:~~

~~an event ratio-calculating module, which is used to calculate a production weight of the event based on the ratios of the program segments in the un-debugged software and the relation of the program segments with the event; and~~

~~an event-generating module, which is used to generate the event based on the production weight for diagnosing the un-debugged software.~~

A software diagnosing system executing on a computer, the software diagnosing system diagnosing an un-debugged software having a plurality of program segments related to at least one event, the software diagnosing system comprising:

an event ratio-calculating module for calculating a production weight of each event basing on the ratio of each program segment to the un-debugged software and on the ratio of each event with respect to each program segment; and

an event-generating module for generating events according to their respective production weights to diagnose the un-debugged software, wherein each of events is randomly selected from a set of events.

2. (Currently Amended) ~~A system for software diagnosis of claim 1,~~ The software diagnosing system executing on a computer as described in claim 1, wherein ~~the ratios of the program segments in the software are~~ the ratio of each program segment to the un-debugged software is automatically determined and generated by the event ratio-calculating module.

3. (Currently Amended) ~~A system for software diagnosis of claim 1,~~ The software diagnosing system executing on a computer as described in claim 1, wherein ~~the ratios of the program segments in the software are~~ the ratio of each program segment to the un-debugged software is determined and input by a user.

4. (Cancelled)

5. (Currently Amended) ~~A system for software diagnosis of claim 4,~~ The software diagnosing system executing on a computer as described in claim 1, wherein ~~the ratio of the event in the related program segments~~ the ratio of each event with respect to each program segment is automatically determined and generated by the event ratio-calculating module.

6. (Currently Amended) ~~A system for software diagnosis of claim 4,~~ The software diagnosing system executing on a computer as

described in claim 1, wherein ~~the ratio of the event in the related program segments~~ the ratio of each event with respect to each program segment is determined and input by a user.

7. (Currently Amended) ~~A system for software diagnosis of claim 1,~~ The software diagnosing system executing on a computer as described in claim 1, wherein the un-debugged software is applied on an operation system simulator.

8. (Cancelled)

9. (Currently Amended) ~~A system for software diagnosis of claim 1,~~ The software diagnosing system executing on a computer as described in claim 1, further comprising:

a diagnosis result-recording module, which generates a diagnosis report ~~based~~ basing on the diagnosis result of the un-debugged software.

10. (Currently Amended) ~~A method for software diagnosis, which diagnoses an un-debugged software having a plurality of program segments related to at least one event, comprising:~~

~~Calculating a production weight of the event based on the ratios of the program segments in the un-debugged software and the relation of the program segments with the event; and~~

10

~~Generating the event based on the production weight for diagnosing the un-debugged software.~~

A software diagnosing method executing on a computer to diagnose an un-debugged software having a plurality of program segments related to at least one event, the software diagnosing method comprising the steps of:

calculating a production weight of each event basing on the ratio of each program segment to the un-debugged software and on the ratio of each event with respect to each program segment; and

generating events according to their respective production weights to diagnose the un-debugged software, wherein each of events is randomly selected from a set of events.

11. (Currently Amended) ~~A method for software diagnosis of claim 10,~~ The software diagnosing method executing on a computer as described in claim 10, wherein ~~the ratios of the program segments in the software are~~ the ratio of each program segment to the un-debugged software is automatically determined and generated by the event ratio-calculating module.

12. (Currently Amended) ~~A method for software diagnosis of claim 10,~~ The software diagnosing method executing on a computer as described in claim 10, wherein ~~the ratios of the program segments~~

~~in the software are~~ the ratio of each program segment to the un-

debugged software is determined and input by a user.

13. (Cancelled)

14. (Currently Amended) ~~A method for software diagnosis of~~

~~claim 13,~~ The software diagnosing method executing on a computer as

described in claim 10, wherein ~~the ratio of the event in the~~

~~related program segments~~ the ratio of each event with respect to

each program segment is automatically determined and generated by

an event ratio-calculating module.

15. (Currently Amended) ~~A method for software diagnosis of~~

~~claim 13,~~ The software diagnosing method executing on a computer as

described in claim 10, wherein ~~the ratio of the event in the~~

~~related program segments~~ the ratio of each event with respect to

each program segment is determined and input by a user.

16. (Currently Amended) ~~A method for software diagnosis of~~

~~claim 10,~~ The software diagnosing method executing on a computer as

described in claim 10, wherein the software is applied on an

operating system simulator.

17. (Cancelled)

18. (Currently Amended) ~~A method for software diagnosis of claim 10,~~ The software diagnosing method executing on a computer as described in claim 10, further comprising:

generating a diagnosis report based on the diagnose result of the un-debugged software.